

under reported in literature and more emphasis should be given when consent is taken for this procedure.

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## 2B.20

### Does splintage method following volar plating of the distal radius influence length of inpatient stay?

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**Aim:** To assess whether the method of post-operative wrist splintage has any influence on analgesic requirements and the length of post-operative stay following volar plating of the distal radius.

**Background:** Volar wrist plating has become a popular option for treatment of displaced distal radial fractures. Post-operatively patients are commonly placed in either a dorsal slab or wool and crepe bandage, depending on surgeon preference. There is little, however, in the published literature as to whether the type of early post-operative splintage influences post-operative pain and length of stay in hospital.

**Methods:** All volar wrist platings for closed distal radial fractures between August 2008 and February 2009 performed at Stepping Hill Hospital, Stockport were identified from the surgical register. Multiply injured patients were excluded. The operative notes were examined for: type of implant, method of post operative splintage, surgeon seniority, type of anaesthesia used (GA or regional block), length of post operative stay, and the type and amount of post operative analgesia required in hospital. We defined a delayed discharge as discharge from hospital more than 48 h after surgery. The reasons for delayed discharge were determined.

**Results:** There were 55 patients included in this study, 13 male and 42 female. The median age was 57 with a range of 21–99 years. The median post-operative length of stay for all operations was 1 day. Consultants performed 25 operations and middle grades 30. Wool and crepe was used in 27 patients, while 28 had a dorsal slab. In patients splinted by wool & crepe, 66% were female with consultants performing 60% of the procedures. Only 1 patient had a delayed discharge for drowsiness. In patients placed in a dorsal slab, 86% were female with consultants performing 32% of the procedures. There were 3 patients having delayed discharge for medical and social reasons only. The median length of stay for both splintage types was 1 day. There was no correlation found between the type of anaesthetic used or the splintage method and post-operative analgesia requirements. Out of 55 patients, 5 patients stayed between 24 and 48 h post-operatively, due to greater analgesic requirements (simple analgesia and opiates), compared to patients staying for less than 24 h.

**Conclusion:** There is no influence on length of post-operative stay after volar distal radius plating according to the method of splintage or the type of anaesthetic used—delayed discharge is more frequently associated with social or medical issues only.

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## 2B.21

### Alcohol and hand trauma—an opportunity for alcohol misuse education?

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**Introduction:** Up to 20% of presentations to Emergency Units involve hand injuries. Many of these patients are referred to hand

trauma units such as ours for treatment. We have noticed a frustrating association with alcohol misuse. This study seeks to quantify this association and look at ways in which we can intervene to reduce further alcohol misuse in these patients and its associated accidents.

**Methods:** Hand trauma patients ( $n=100$ ) attending our minor injuries unit were asked to complete questionnaires that assessed their alcohol use and its role in their injuries. Representative case histories are described.

**Results:** 23% of patients had drunk alcohol preceding their injury and these injuries were most commonly from broken glass, accidental knife injuries or crush injuries. 70% of these injuries occurred after 10pm at night. These patients admitted drinking between two and 18 units of alcohol prior to the injury and up to 42 units per week. Only one of the patients in which alcohol had been initiated sought professional help for their alcohol use and yet out of these patients 28% admitted to drinking more than 21 units per week.

**Conclusion:** We have shown that a quarter of hand injuries are contributed to by alcohol which may mean that the NHS is spending up to £100 million a year on such injuries. In the light of these findings, we are introducing alcohol misuse screening and alcohol misuse education to our hand trauma practise. Alcohol interventions conducted in trauma centres can reduce trauma recidivism by as much as 50%. We aim to similarly reduce the burden of alcohol in the context of hand injuries.

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## 2B.22

### Surgical management of distal tibial metaphyseal fractures with a locking plate

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**Introduction:** The management of unstable distal tibial metaphyseal fractures can be challenging. A variety of treatment methods have been suggested for treating such injuries. The main advantage that the minimally invasive percutaneous plate osteosynthesis (MIPPO) technique offers over classic open reduction and internal fixation is that, a mechanically stable fixation can be achieved without extensive soft tissue dissection. This study assesses the outcome and complications of such fractures treated with a distal tibial locking plate (LISS) using the MIPPO technique.

**Methods:** A retrospective case note and radiological review was carried out on all patients who had internal fixation of distal tibial metaphyseal fractures at a single institute between November 2005 and October 2009. Mechanism of injury, fracture classification, treatment modality, union time, complications and final deformity were assessed.

**Results:** Fourteen patients were included in the study (8 men, 6 women), with an average age of 45 years (range 20–71). High energy trauma accounted for 4/14 fractures, most of the rest were the result of a fall at home. Fractures were classified according to the AO classification system: 10-43-A; 1-43-B; 1-42-B; 2-43-C. Three fractures were open (Gustillo-Anderson: 1-I; 1-IIIA; 1-IIIB). Distal tibial locking plate was used in 10 patients as the primary treatment. The four remaining cases were treated for non or delayed union following failed treatment with external fixator. The average time to radiological and clinical union was 289 days (range 68–1122). Eight patients regained pre-op mobility, three developed chronic pain and stiffness of the ankle, one died. One patient developed a valgus deformity of 10°. Three cases were complicated by a superficial skin infection and one by deep infection.